

ABSTRACT OF THE DISCLOSURE

A system for cloning input/output (I/O) devices connected to a network hosting an industrial control system includes a first network coupled to a second network. A first plurality of I/O devices are connected to the first network. A second plurality of I/O devices are connected to the second network. A master computer is coupled to one of the first and second networks and includes control software with an object oriented model for defining attributes and operations of the I/O devices on the first network to allow cloning of the I/O devices onto the second network. The object oriented model includes a hierarchical class structure with inheritance. The hierarchical class structure includes a device class and a plurality of device types. The object oriented model includes at least one class level hierarchically below the device class. Devices instantiated at a class level inherit the attributes or operations of the class level.